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(12) United States Patent Krimmer et al.

(54) INSOLE OR SHOE SOLE

(71) Applicant: stAPPtronics GmH, Sulz (AT)

(72) Inventors: **Peter Krimmer**, Vienna (AT); **Philip Olbrich**, Vienna (AT); **Thomas Frois**,

Sulz (AT)

(73) Assignee: stAPPtronics GmH, Sulz (AT)

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See application file for complete search history.

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Primary Examiner — Christian Jang (74) Attorney, Agent, or Firm — Volpe and Koenig, P.C.

(57) ABSTRACT

Insole or shoe sole, which has a sensor device (10) having a plurality of sensor fields (1-9) for pressure detection and an electronic unit (15) that is electrically connected to the sensor fields (1-9) and has electronic components (17), wherein the sensor device (10) is formed in the manner of a sandwich with a middle layer (12) made of a piezoresistive material, a top layer (13) arranged above the middle layer (12) and a bottom layer (11) arranged underneath the middle layer (12). The top and bottom layer (13, 11) each include an electrically conductive material (14) in the region (1a-9a; 1b-9b) of a respective sensor field (1-9). The top and bottom layer (13, 11) each have a protruding flexible tab (23, 22) having conductor tracks (24-26) for electrically connecting the sensor fields (1-9) to the electronic unit (15). The electronic unit (15) has contact regions (29), against which the tabs (23, 22) bear by way of their conductor tracks (24-26).

11 Claims, 5 Drawing Sheets

